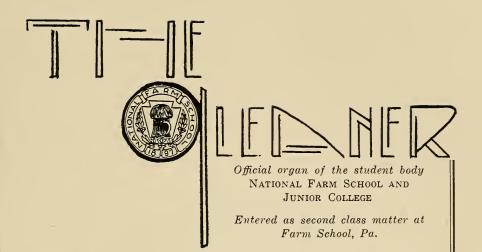
THE GLEANER

NATIONAL FARM SCHOOL AND JUNIOR COLLEGE

July-1947

Let the farmer for evermore be honored in his calling, for they who labor in the earth are the chosen people of God.

Thomas Jefferson



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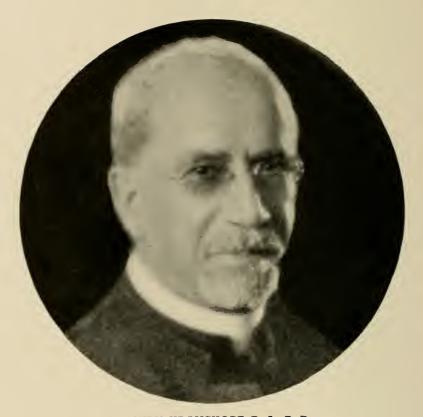
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JOSEPH KRAUSKOPF, B. A., D. D.



IFTY-ONE years ago a young Rabbi founded an institution that has today grown to be a college. The founding of the National Farm School was the result of a promise young Rabbi Krauskopf made to Count Leo Tolstoy. A promise to establish

a farm school, where young men-Jewish or Christian-might gain scientific and practical knowledge in mans oldest art—agriculture.

In the past fifty-one years the school has graduated many men who have brought honor and renown to the founder and the school.

The president of the school, Mr. Work, has said that if this school graduates one man who will do for the farmer what Samuel Gompers did for the factory worker, the fify years of effort that have built the school would be repaid a hundred fold. That may be so, but we feel that any man who graduates and becomes a good citizen is a contribution to the nation's welfare that cannot be overlooked.

One of the former graduates, Dr. Joseph Jacob Taubenhaus, has made a contribution toward the justification of the school by his success in a field which, without his efforts, might still be a mystery today. In his lifetime he became a renowned authority on the diseases of sweet potatoes, other vegetables, and summer cereals. The finest work of his life, however, was that in which he established himself as the world's greatest authority on cotton plant diseases.

To quote from the Alumni Review of 1942—"The basic agricultural education which Taubenhaus received at Farm School left a lasting impression upon his life. He acquired there the fundamentals of agricultural theory and practice. He came into intimate contact with the soil of America and succeeded in penetrating into the spiritual life of the country."

Dr. Taubenhaus is but one of the many graduates who have reflected honor upon their Alma Mater. We look forward to seeing many more who will reflect their glory upon the new college.

There are many reasons for the change which is now taking place, a change that will make the Junior College a senior college. A change that will be appreciated by all persons involved; the students, faculty, alumni, and the school itself.

The growth of the school from a small farm and pioneer building to a large farm of over one thousand acres with live stock, shops, and buildings is a tribute to those who were inspired by the work of Dr. Krauskopf. The new change to a college shows that the initial ambition has not been lost.

The value of the school cannot be estimated in dollars and cents; it must be measured by the value of the output, which in this case is not only a student, but a citizen as well.

The teaching of men to be good citizens has always been a prime objective with the administration of the school. Their success can again be measured by the examination of the records of former students.

The basic aims of the school are still:

First—To prepare young men, regardless of creed, to become successful farmers, workers in agriculture, allied industries, or in agricultural education.

Second—To provide young men with an academic and cultural education which will lead to well rounded citizenship and leadership in their communities.

When the new curriculum is introduced, the school will offer a degree, a degree which we hope will also be an inspiration to those men who have chosen not only an occupation, but "A Way of Life."

RECENT TRENDS IN AGRICULTURE

The great demand for new inventions will not satisfy the consumer field alone. Farmers, too, are looking toward the horizon for machines which will lighten their burden. The leading producers of farm machinery, John Deere, International Harvester, Minneapolis-Moline, Case, and others, have many new things planned. Among them are the new spindle type harvesters, self-propelled combines (to be on the market in 1947), new and safer manure loaders, new tillage implements, and an increase in the number of one-man balers. The social effects of these changes will be far-reaching.

Whereas formerly it took 80-85 man hours per acre to harvest cotton, with the aid of the new cotton picker the time is reduced to five man hour per acre. Mechanization undoubtedly will aid in the producer to stay in business, but profits will also depend upon high yields of a uniform product in sufficient volume and quality to allow efficient manufacture. Adequate use of fertilizer, based on soil and plant needs, and judicious use of cover crops and good seed of an adopted variety of cotton, must be combined with efficient production methods. The most economical use of the mechanical harvester will depend on large yields, as cost of operations is based on acreage covered. Only large fields allow a low cost per bale for picking.

A peanut sheller has been perfected which will shell as many peanuts in one hour as three hundred men can shell in that time. Farm engineers have also deveoped a tractor-mounted, two-row harvester which digs, lifts, shakes and windrows peanuts, all in a single operation. By hand methods it takes one man thirty-two hours to carry out these operations on an acre. The machine will harvest two acres an hour, the equivalent of a crew of sixty-four men.

The following facts show the trend in mechanization on many farms: *

TRACTORS ON FARMS IN U. S.	COMBINES
1910	1920 4-6,000
1920 246,000	1930 61-65,000
1930 920,000	1940
1940	1942 269,000
1945	1945 354,000
1946 (July 1) 2.200.000	

In the next few years not so many people are going to be needed in agriculture. The little fellow is going to be between the devil and the deep blue sea because he can't afford to buy a tractor and other machinery. His productivity will be low because in general he has the poorest land. (?) Numerous signs on the agricultural horizon point in the same direction. The coming widespread use of the cotton picking machine and the flame throwing weed killer indicate that many small farmers will be out of jobs soon. Dr. Arthur Raper, farm economist, estimates that the labor needed to farm cotton on the plains of Texas and Oklahoma will be reduced fifty-nine per cent by 1950. He predicts that 1.6 million farm workers will have left Southern farms between 1940 and 1956, a figure which does not include their families.

It is a mistake to believe that small farms are necessarily uneconomical. Many small farms are becoming mechanized, and there is reason to believe that they are very efficient. Technology need not necessarily be against the interests of the small farmers. For some years now, a few manufacturers have been selling machinery especially designed for small farms. In some instances mechanization may actually give the small farmer an advantage.

* Facts for Farmers, Sept., 1946.

Despite years of talk about mechanizing the majority of small farms, most of the big manufacturers have warily shunned this field. To be sure, International Harvester has announced for 1947 its Farmall Club, rated at 8 H. P. on the drawbar, and Deere, Case, Oliver, Minneapolis-Moline and Avery claim that they are prepared to follow suit. Some fifteen small companies have been producing the bulk of garden tractors, rotary tillers, and other light machinery. But the main outlet for these light tractors with their relatively high operating costs, is expected to be on suburban estates, golf courses, and market gardens.

The small companies sold only 16,900 such units in 1945, and their

wartime sales showed no appreciable increase.

Most of these machines are relatively inefficient and costly to operate. Many have serious "bugs," such as lack of balance, side draft, or difficulties in attaching tools or getting any to fit. After all is said and done, the best friend of the small farmer is still the homemade "doodlebug" with its cut down frame and foreshortened drive shaft.

Another dangerous trend connected with mechanization is the decrease in the number of farms and an increase in their size. The average farm is today fifty acres larger than it was twenty-five years ago. (The averages combine small residential farms of the East with large ranches of the West). Over half of the farms today are over five hundred acres, compared to a third in 1920. Forty per cent of America's farms today are one thousand acres. The present total of all farms in this country is 5,860,000 units, 600,000 less than in 1920, despite the 186,000,000 acre increase in land in farms.

Moderate sized farms have felt the greatest impact of mechanization. While larger farms have become mechanized at a rapid clip, these smaller units have had to do as well in order to successfully compete. In a great many cases, this has necessitated the operation of larger acreage to pay for steadily increasing capital outlays for machinery. For example, the number of 100-180 acre farms decreased by over 110,000 during the war. For the most part, they were combined with

others to make larger units.

Little new farm land has been available in recent years. Thus, the large farms became large chiefly by absorbing other farm units in part or in whole. Machines were beneficial to the extent that they made work easier and provided more leisure. The expense of machinery, however, reduced the number of owners and added to the number of tenants and hired workers. Sharecropping and tenancy increased. Forty-two per cent of 6.8 million farm operators in the United States in 1935 were tenants. A large part of the remainder were paying interest on borrowed money.

The 1940 Census of Agriculture revealed the following: Ten per cent of the farms sell more than half of all farm products sold or traded in this country. Fifty per cent of the farms sell less than one-tenth of

(Continued on page 9)

The Origin of Ornamental Gardens

The garden came into its own when primitive man no longer depended upon the chase, or migratory stock raising, for his sustenance, and settled in a chosen spot. It was probably alongside of his hut, on a small piece of ground, that his womenfolk tilled the ground with an animal's horn or shoulder blade attached to a stick with leather thongs, or some other crude device. Into this patch he brought wild grains and roots, and planted them. He found that these plants grew better of they were watered when the ground became dry, and the earth around their roots cultivated.

Primitive man had trouble with animals getting into his garden and placed thorned branches into the area surrounding his plot. These branches commenced to grow, and thus we have the rudimentary beginnings of the hedge.

These gardens were purely ones of necessity, and were not made for esthetic purposes. Not until man "built finely," as Bacon said, did he plant a garden to please the eye.

Climate, the nature of the soil, and religious beliefs were further factors in the evolution of the garden. Thus in Persia, and other hot and arid countries where the intense heat required much water to cool the air, water was in evidence in the forms of pools and fountains. This style carried to Spain, and was developed in the Spanish gardens of today.

Religious taboos had their part in the development of garden adjuncts. Totems and Trees of Life set up in gardens by primitive man developed into garden statuary. The effect of Buddhism, as it spread over the East, and to China and Japan via the Straits Settlements, brought a taste for copying the designs of Nature; hence an informal type of garden was developed.

For a long time the plants used in decorative gardens grew naturally in their localities. Commerce was responsible for the distribution of plants almost up to the threshold of our modern times, when plant explorers and traveling botanists have made a special business of plant importation.

The garden of today has lost its nationalistic atmosphere and has become international in scope. Our modern gardens combine features from gardens of the past, and in them are grown flowers from all climates and countries.

WILLIAM L. STERN

"SUPER-DUPER"

Exploding grains of cereal may be, to some, a treat; But strange indeed, as it may seem, I buy the stuff to eat! Some people come to breakfast and give a joyous shout When, by simply adding milk or cream, the flakes turn inside-out. You may term me old fashioned, But I wish they were rationed.

HAROLD SILVERMAN

MANURES

The term "manure," according to American usage, means those types of organic matter which are relatively low in soil nutriments. Since there are processes by which artificial manures can be made, namely composting, it is customary to differentiate among the kinds of manures.

By natural manures are meant those types which are the undigested matter excreted by animals, mixed with a suitable absorbent material such as straw litter, wheat stubble, etc. Natural manures may be further divided into groups according to the animal voiding the manure. Certain animals such as horses, chickens, and sheep produce manures which are called "hot manures" because of the heat evolved due to fermentation. These manures are very frequently used in heating hot beds and as an aid in promoting more expedient fermentation of other manures such as cow and swine. Cows and hogs are typical producers of "cold manures," which are the excrements from which no heat is evolved during decomposition. "Cold manures" can be used almost immediately after they have been passed by the animals without appreciably injuring growing plants.

Artificial manures are sharply differentiated from natural manures in the respect that they have not passed through any digestive process. These artificial manures may be composed of organic wastes like entrails, blood, or feathers and corn stubble, wheat straw or leaves treated with nitrogen compounds and composted. Green manures like the grasses and legumes grown as vegetal coverings plowed under, also come under the same category.

Although manures are used as definite crop stimulants, their greatest value lies in the role they play in improving the water-holding capacity of the soil. While the commercial fertilizers supply plant nutriments to a relatively greater degree than do manures, the former have little or no effect upon the moisture retention of the soil. Soil water is important for mineral nutrition by plants since the nutrients must be in solution before the plants can absorb them.

MICHAEL BENKO, JR.

PLANT CHEMICULTURE

The idea of raising plants in water to which plant nutrients have been added is not a late discovery of science. The principles have been known for several hundred years, but not until the past fifteen years has the idea come out of the experimental stage into the commercial field.

Before the second World War, the Pan American Airways which cross the Pacific had established chemiculture tanks at Wake Island to supply their passengers with fresh vegetables. During World War II the United States Army Air Force used the soilless culture method for the production of vegetables at certain isolated air bases. At these locations vegetables could not be grown in the available soil or the natural water supply.

During the last twenty-five years leading plant physiologists in various universities throughout the world have used water culture methods to determine what elements were needed by the plants.

By growing plants in aqueous solutions of known composition, to

which various chemicals were added, the scientists could determine what chemicals were used by plants in the different stages of growth. Dr. Wm. F. Gericke, associate professor of plant physiology at the University of California, is now known to be the first person to have suggested and started the commercial use of chemiculture.

The greatest advantage of chemiculture lies in the improvement in the quality of food products, of mineralizing the foods, of adding to the color and perfume of flowers, and of perfecting new products such as seedless tomatoes and seedless watermelons.

These marvels can be offered because unlike soil farming, all the elements, with the exception of the atmospheric elements that go to build up the plant, can be controlled.

Another advantage is that the hard manual labor is lessened. The plow and the hoe are abolished. No cultivation or tillage of soil is necessary. The harvesting of the crop is simpler and less expensive. No rotation of crops is necessary; in soil the same crop cannot be grown year after year unless the soil is treated. Plants also grow much larger because they receive water and mineral nourishment through the roots.

The nutrient solution is so balanced that plants absorb a minimum amount of solution, and therefore no excess evaporation or transpiration occurs. The root structure is smaller and plants do not have to seek the food. The plant can devote its extra energy to the building up of larger fruits or flowers and a more vigorous growth.

The cost of chemicals is much less than adding fertilizer to soil. Twenty-eight pounds of chemicals were needed for growing 1,280 pounds of tomatoes, and fifty pounds of chemicals for 1,000 pounds of potatoes, according to Dr. Guicke's experiments. One dollar per month is sufficient for about 800 plants, such as tomatoes.

Tanks or containers to hold the solution can be made of wood, concrete, or metal, but they must be water proof, acid and alkali proof, and non-rusting. They may vary in size from one foot to four in width and extend to any length. For commercial purposes, it is better to have them $2\frac{1}{2}$ feet wide, 10 inches deep, and as long as is convenient. A tray is made of $\frac{1}{2}$ inch wire mesh to fit on the inside of the tank. A bedding of white pine excelsior, straw, glass, wool or peat moss is placed in the tray to act as a holding medium and to prevent light from penetrating to the roots.

Very good results have been obtained by using the following amounts of fertilizing salts per 5 gallons culture solution as recommended and used by the New Jersey Agricultural Experiment Station: Monopotassium Phosphate (KH₂PO₄) 5.9 grams, Calcium Nitrate (Ca(NO₃) 2 .4H₂O) 20.1 grams, Magnesium Sulphate (MgSO₄.7H₂O) 10.7 grams, Ammonium Sulphate (NH₄) 2 SO₄) 1.8 grams.

Each of these chemical salts is dissolved separately in about a pint of water, their solutions mixed, and then diluted with water to make 5 gallons. "Stock" solutions of trace elements are prepared as follows:

Stock Solution A

In one half gallon of water are simultaneously dissolved 3.2 grams each of boric acid (H_3BO_3) , manganese sulphate $(MnSO_4.7H_2O)$, and zinc sulphate $(ZnSO_4.7H_2O)$. To this solution one eighth teaspoon of copper sulphate $(CuSO_4.5H_2O)$ is then added if desired. This solution may be added in the proportion of 10 cc. to each 5 gallons of culture solution.

Stock Solution B

Dissolve 0.8 g. of iron chloride (FeCl₃) in 1 pint of water. It should be added to culture solutions just before actual use in the proportion of 20 cc. to each one gallon of culture mixture.

Thus, as time marches on so does the endless search of science for

the improvement of agriculture also advance.

HAROLD HAFTEL

RECENT TRENDS IN AGRICULTURE

(Continued from page 5)

all farm products sold or traded in this country. The top one per cent of the six million farms in this country accounted for one-fifth of the total value of farm products sold and traded in 1940. The top five per cent accounted for forty per cent, and the top ten per cent for over half.

FARM GROUP PER CENT OF FARM PRODUCE SOLD OR TRADED

Top third	 												. 8	34	%
Middle third	 												. :	13	%
Bottom third	 													3	%

Five years later the 1945 Census of Agriculture revealed a further growth in concentration during the war years, a shrinking share of total farm income to small farmers and an expanding slice for big farmers.

The advance of mechanization and electrification, and the talk of "reconversion" is so much idle chatter to the big farmers who are investing large sums in hay foragers, combines, cornpickers, and other power machinery. This mechanization movement was primarily responsible for the wartime increase in farm production, as is indicated by the fact that fewer agricultural workers, fewer unpaid family workers, and fewer farms were needed to do the job. Productivity per worker (farmers, farm workers, and family workers) increased thirty-five per cent during the war and that three billion man hours were displaced. Yet two-thirds of the nation's farms have been left out of this mechanization movement, as is indicated by the latest census returns which reveal that four million farms have no tractors, and, of these, one and a half million have not even a horse or mule.

At the very time when industry is enjoying its greatest peace-time boom, the American farmers are nevertheless being told by the National Association of Manufacturers and U. S. Chamber of Commerce spokesmen, along with their political representatives, that adequate markets can not be provided to absorb the full output of agriculture and keep the promise of "full production." In a report titled, "Variations in Farm Income," the N. A. M. and C. of C. "farm experts" recommend that one-fourth of the nation's farms be speedily eliminated from agriculture and that as many as two-thirds be eventually eliminated.

An unhealthy condition in agriculture similar to industry has been developing in the past few years, whereby people are dependent upon other people's property for livelihood. The old saying, "forty acres and a mule," does not apply today. Recent trends in agriculture show a tendency toward farms being changed to factories, factories in the fields. Agriculture is now becoming commercial to the "nth" degree. It is now more than an independent and free way of life, it is a business.

—Alfred Hass.

Dairy Supervisor Discusses Plans

Mr. Paul Fickes, new supervisor of the Dairy Department, is new to the students, but not to the school itself. At one time he was dairy supervisor at N. F. S. Mr. Fickes' most recent work was with the Reidina Farm at Newtown, Pa. He has spent his whole life from childhood on around farms.

Mr. Fickes lives at Penn Hall with his brood of daughters. (Sorry fellows!! They're too young; yes, even Barbara.)

A likable fellow whose only pleasure comes through hard work, he is usually seen around the dairy from dawn till late afternoon. The admission price asked to see him is the possibility of having a milk bucket thrust into your arms and the question, "Can you milk?" Before you have a chance to answer, you are sitting beneath a cow and trying to extract that "white stuff" which supposedly comes from cows.

Mr. Fickes expects to make some changes at the dairy. All the Ayrshires will be sold and instead, the dairy will concentrate on raising mostly Holsteins and a few Guernseys. Before Mr. Fickes came, the cows were kept on a 20% protein ration which has now been lowered to 16%, and will eventually be dropped to 14%.

GREENWOOD SONNY BOY, the prize bull which Farm School has part interest in, is back at the dairy. His seven nearest dams have averaged over 23,000 lbs., of milk and 906 lbs., of butter fat. Three of his daughters are now at the college dairy.

In the past few months, there has been considerable mastitis trouble. Dr. Biltz of the Squibb laboratories, which have been producing considerable amounts of penicillin, will work with the school using the products donated by Squibb.

In the near future, a manure spreader and a tractor will be at the dairy at all times in order to prevent accumulation, waste, and unsanitary conditions.

The possibility of having the calf barn torn down and replaced by a community gathering place for the judging of cattle and the holding of meetings for the farmers in Bucks County is another job likely to be considered. At present the college has no place to exhibit animals for judging by the Future Farmers of America, who use the N. F. S. and J. C. animals to gain judging experience.

Some of the projects on the calendar for the dairy classes are: proper feeding for each individual animal, proper grooming, trimming cows' feet, and the proper use of the various pieces of equipment.

The National Farm School and Junior College dairy is reaching for far horizons in the education of the men who will run the Future Farms of America. As Mr. Fickes says, "It's not the average fellow running a farm who earns the money; it's the fellow who is above average."

ALEX GREENBLATT

SAVE YOUR HEALTH FOR JULY TWELFTH

Art Class Formed at College

Palettes, easels, paints, and brushes seem to be strange words on an agricultural college campus, but with the recent appointment of Mr. Maximillian Vanka as art instructor of the National Farm School and Junior College, many students have been taking advantage of this fine opportunity to improve their artistic talents.

For the few students who have not yet noticed his presence, Mr. Vanka is the bearded, dignified-looking gentleman seen around the campus every Monday and Tuesday afternoons with his students who have put away their hoe and shovel for a few hours in exchange for a brush and palette.



Some of the work taken up so far has dealt with perspectives, construction, charcoal sketching, and out-door crayon work. These preliminary lessons are leading up to the use of water colors and oils.

A-behind-the-scene glimpse shows that Mr. Vanka is an outstanding and talented man. A visit to his home is like walking into an art gallery. Everywhere can be seen his fine, precise, colorful paintings.

Mr. Vanka was born in Zabrel, Yugoslavia, in 1889, where he also had his first schooling. Soon after, he entered the Belgium Academy of Art in Brussels, Belgium where he studied for five years. After that he spent a few more years at the Beaux Arts in Paris. After a brilliant career at art in many European countries, he was forced to take refuge in America where he could work freely.

He arrived in America six years ago and painted a number of mosaics in a large Pittsburgh church. After showing his works at many art exhibits he settled at Rushland, Pa., where he now resides.

He is also the holder of numerous medals for his outstanding portraits of European royalty.

With all his work and time seemingly taken up with art, he still finds time for his hobbies, his outstanding one being horticulture.

With art taking its first peep into Farm School, it won't be long until it will be included in the regular curriculum with assigned credit.

ROGER GABLE

BETWEEN THE FURROWS

With

Morty Ballin

Fast away the old term passes. . . Here it is almost final exam time and it seems that only yesterday we welcomed the lower classmen with open arms and dead chick embryos. They say that time and tide wait for no man, tempest has fugited and here it is time for another issue of the *Gleaner*.

When they gave us this job we were told to write on articles of general interest to the student body as a whole. Now let's see. What has been happening around here lately that somebody would be inter-

ested in? . . .

We had to look twice at the cover of the April, '47, issue of Soil Science magazine to make sure that our eyes weren't deceiving us. Sure enough, it was true though; our Mr. Elson had his name down

as author of a very interesting article on soil chemistry.

What's your project? It seems that you aren't quite in style around these parts if you haven't got a calf, rabbit, guinea pig or goat to call you "Pappy." We don't know how true it is, but we hear that there will be a new office fitted out in the Administration Building with "W. P. A." printed on the door. Could these initials stand for "Work's Project Administration"? (We will now observe a brief moment of silence for the pun that just died).

CHAFF

We wonder what there is in Ambler that seems to be such an attraction to Bill Roomet . . . Could it be organic gardening? . . . Fred Staeble is improving—he only sleeps during half the class now. Al Hass has threatened to toss anyone who gets in his hair into that compost heap he is making near the garden plots . . . watch out—Greenberg, Angel, Schwartz—and well, this may be the last you hear of yours truly, too. . . . We all had a laugh when Mr. Purmell had to wake Ed End up to hand him his Genetics test paper. Ed didn't mind too much, though; he just said, "Thanks," and dozed off again . . . Could it be that we hear wedding bells far off in the distance, say in the vicinity of Philadelphia, ringing for Goldie? . . . Who can tell?



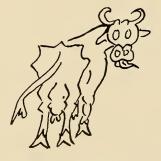
If we think we've got chickens worth crowing about we ought to take a look at some of them out Glen Cove way in New York. Out there a hen strained for three days, laid a 15-ounce egg, took a look at it and collapsed . . . (So help me!).

Upon giving **Jack Greenberg** back his Chemistry test paper, **Mr. Schmieder** explained that he gave him an 88 so Jack could argue it up to a 90.

Well, I guess we'll call it quits now until next issue. This is Morty Ba-a-a-llin signing off. So long!

SHORTS AND MIDDLIN'S

Now that the baseball season is on in full swing there are quite a few contests between the various student groups here at school. One evening, while passing in front of Lasker Hall, we saw a bunch of fellows indulging in this sport. We strolled over to one of the men in right field and asked what the score was. The answer to this query was, "34 to 0." We asked who had the 34, and were told that the team at bat did. When we said to the fielder that his team must be taking an awful licking, he replied, "Oh, that's O.K., we haven't been up to bat yet." . . . We got a glimpse of the school's band uniform . . . Wow! . . . Just call us Caballeros.



THE END



Contribute To

YOUR

Magazine

The GLEANER

CYNIC'S CORNER

As summer comes along, we look back with fond memories—on the past year we have spent at our dear college. While tripping gaily along through the halls, we have asked fellow students (?) about their fondest recollections of the time they have spent here. We first came across B. A. Brownoser whose presence filled the air with eau de la cow manurè (No. 51/4). Upon drawing near with clothespinned nose, we asked him to tell us of his most thrilling experience here at Farm School and J. C. He racked his brain trying to recall the most thrilling of the many, many experiences. Suddenly, with a shudder, he remembered one outstanding incident. After using third degree methods we finally got him to tell us all about it. As soon as he recovered consciousness, he began.

"'Twas the night before a genetics test, and all through the dorm, not a creature was stirring . . . quiet wasn't it? As the worms crawled out from between the pages of my book, (non-hemophilic, blue eyed, left handed worms) I carefully flicked each one into my specimen jar. I had just started to study when I heard a knock at my door. Not having Richard around to open it, I quietly yelled at the top of my lungs, 'Come in.' The door opened and there stood before me gasping for breath, a member of our athletic team. He greeted me with a cheery, 'Got a cigarette, bub?' Naturally I answered, 'take a pack or two,' Naturally. As I watched his shaking hand light the cigarette, I realized what it was that had driven him to smoking. When he had first come to Farm School and J. C. he had been a ninety-seven pound weakling; now after a year of gym classes and athletic training he was still a ninety-seven pound weakling.

"Inhaling deeply, he staggered out of the room, leaving me in my solitude. I returned to my book, but soon found, as usual, that I could not concentrate. Not having a very strong will power, I turned out the light and placed the book under my pillow in order to absorb all the wonderful but useless (I think) knowledge by osmosis.

"I found it hard to fall asleep, as someone was playing a grand piano in the hall. Not having anything else to do, I took my hot plate out from its cleverly concealed hiding place, and began cooling my usual nightly snack. Standing on my bed so I could reach the ceiling light, I took down my bottle of Scotch. As I was just settling back to enjoy my meal, I heard a noise. Quickly reaching under my pillow for my machine gun, I turned to face the foe, but it was only my pet baby giraffe who had to—well anyway...."

At this point we stopped our hero and asked him what was so horrible about all that. It sounded all very pleasant and natural to us. He then replied, "It's horrible because I've been doing the same thing every night since, and the monotony is driving me mad."

After putting B. A. Brownoser out of his misery, and giving him a bottle of rye, we proceeded on our way.

JERRY FRIEDMAN AND BURT ROTHSTEIN (the Bobbsey twins)

UPKEEP OF FARM MACHINERY

As man is dependent on oxygen to breathe, so is the farmer of today dependent for his success on machines. Here are a few helpful hints on the preservation of farm equipment.

Care and cleanliness is the greatest factor in the proper functions of farm machines. Proper lubrication and tire inflation, correct amount of water in radiator, protected gears and engine, proper water level in battery, and moderate speed driving all add up to give the tractor its necessary daily "diet."

Gears are vital, costly, and hard to get. To protect them, it is important to change oils and greases at recommended intervals. When changing transmission and differential lubricants, take time to remove all the sludge, grit, and tiny particles that adhere to the gears.

The water level in your tractor's battery should be kept about three-eighths of an inch above the plates. A fully charged battery will not freeze.

Air filters should be cleaned twice a month, depending upon the amount of dust you encounter.

Schedule a regular time each week for checking your tractor tires and you'll get longer time life and better performance. Look over your tires for broken casings and make sure you are getting all possible traction.

Don't pour cold water into a hot engine. Let the engine cool gradually and leave the motor running while refilling. Do not drain the radiator immediately after use in freezing weather.

Keep your tractor out of the bright sun when it is not in use—the sun is hard on paint and tires. Avoid letting your tractor stand where oil will get on the tires; it will pay to wash the tires with water after spraying or dusting with copper or sulfur mixtures.

LOOK FOR THESE CAUSES.

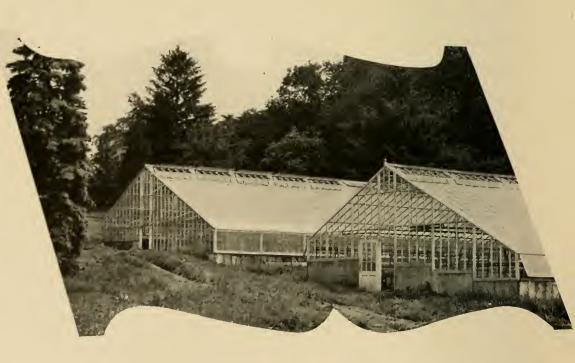
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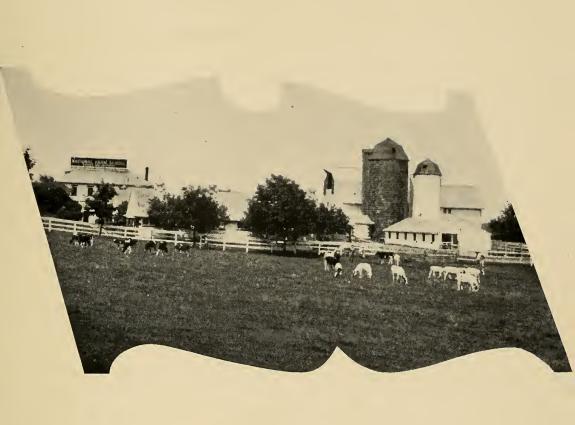
II THIS HALLENS	LOOK FOR THESE CAUSES
Starter won't work	Weak battery, loose wiring, defective starter, oil too heavy (in winter), stuck pistons.
Starter works but engine won't start	Make sure tractor has plenty of gas. Fuel pump failure, wet distributor or magneto, faulty tim- ing, plugs wet, defective coil or condenser.
Engine misses	Wires loose, plugs wet, valves stuck, leaking or burned, tappet clearance incorrect, carburetor misadjusted, leaky gaskets.
Using too much oil	Wrong grade of oil, oil level too high, excessive idling, leaks (lines, gaskets, bearings), high engine speed, ring trouble, loose bearings, valve guide worn.

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SCENES AROUND





THE CAMPUS

CAMPUS INTERVIEWS:

Who Will Win the American League Pennant?

Bill Osler:

The Yankees of course; who else? They have acquired new blood in "Yogi" Berra, their roly-poly right fielder. Don Johnson has given the Yanks the other starting pitcher they sorely needed last year. The "Yankee Clipper" has started on the long way back to stardom. He illustrated this on his first time at bat, by smacking out a home run. Yes, the Yankees will win the pennant and, I venture to say, the World Series.

Ralph Smith:

I believe the Detroit Tigers will cop the American League flag this year. If they get the pitching they received last year they will win. Dick Wakefield and Hoot Evers should supply the needed punch. They did lose Hank Greenberg, but his place is being taken by Dick Werk, who shows a lot of promise. The Tigers are an "if" team, but I sincerely think they have the makings of a championship team.

Marty Kwait:

I think the Boston Red Sox will win the pennant. They have the same team that won the flag last year. They also have filled one of the weak spots by the acquisition of right fielder Sam Mele, who was formerly with Scranton. Mel Parnell and Harry Dorish give them two good pitchers to add to their already excellent mound staff. The other teams are strengthened, but the Red Sox show too much class.

The opinion of the student body is that it will be a very close race, with the Red Sox ending up on top. Here is the way N.F.S.J.C. students picked them:

- 1. Boston Red Sox
- 2. New York Yankees
- 3. Cleveland Indians
- 4. Detroit Tigers
- 5. Chicago White Sox
- 6. St. Louis Browns
- 7. Washington Senators
- 8. Philadelphia Athletics

FRANK BUSHNELL



CAMPUS INTERVIEWS:

Who'll Capture the National League Flag?

Norman Pogust:

I believe the Pittsburgh Pirates will capture the National League pennant because of their great power at the plate. In Ralph Kiner and "Hank" Greenberg, they possess two of the best home-run sluggers in baseball. Their pitching staff, now strengthened by Higbe and Behrman, is probably the best in the league. For these reasons, the Pirates are the men to watch in the National League.

"Lou" Serridge:

I prefer the Brooklyn Dodgers because I think they have the most well-balanced team in the National League. Their speed on the bases, sparked by Stanky and Reiser, is another vital factor which will contribute to their success. Even with the absence of "Leo" Durocher, I think the Dodgers have the team to capture the pennant.

"Ron" Schneider:

The Cardinals will win by 10 games. Perhaps this seems like a farfetched statement because of their recent losing streak, but in my opinion they have the team which plays the best when the pressure is on. With so many experienced players on their roster, the St. Louis Cards seem like a heavy favorite to capture the National League flag.

This is the order in which the National League will find itself, comes the end of the season, at least in the opinion of the student body.

- 1. St. Louis
- 2. Pittsburgh
- 3. Brooklyn
- 4. Chicago
- 5. Boston
- 6. Philadelphia
- 7. Cincinnati
- 8. New York

WALTER LONG

Twilight Dance JULY 12th



Poultry Club

Just recently the last of a batch of six hundred broilers belonging to the Poultry Club were shipped to market. The club's project was started in January with the express purpose of giving members of the club an understanding of brooding chicks and raising broilers, through practical experience. It was also a money-raising project to

fill the deficit in the club's treasury.

The birds were mostly White Rocks, with a few Leghorns, all cockerels, thrown in. The original plan called for keeping the birds for twelve weeks, at which time they would weigh three pounds and be ready for market. Because of good management, the birds were ready in ten weeks and managed to fetch the price of thirty-one cents per pound. Although inexperienced in their field, the members of the Poultry Club were able, through keeping the brooder clean and sanitary, to keep the mortality rate down to three per cent. The club members are grateful to Mr. Crigger, who advised them on many problems which the club met.

In the future, the Poultry Club plans to have outside speakers, debates within the club and movies on such topics as poultry manage-

ment, disease, breeds, and feeding.

All students interested in poultry, whether it be from a commercial point of view or just a backyard flock, are invited to come to the meetings and join the club. It meets 7:30 P.M. every first and third Thursday of the month.

ALFRED HASS



THAT MATH EXAM

That Math Exam! Oh me! Oh my! It hit me in my bestest eye. No matter if those symbols lie, They yanked from me an awful sigh. I settled down, resolved to try; And, yet, my grade was not so high. Though Y is X and X is Y, To me there is no reason why. He tells us to complete a square With letters varied, letters rare. That Prof. don't seem to have a care If I just wear my thinker bare. "Of questions twelve, just answer ten." He thought them up out in his den. They're not the stuff for us real men, So let's elect him to the pen. When chalk is scarce, erasers nil, This Math can be an awful pill. But, Prof., you've got us in a mill. So grind away and get your fill. I'm telling you I'm on the run, So, if you like, get out your gun. There's no such thing under the sun As Mathematics called, "Just fun."

ANONYMOUS

Farm School Boys Raise Guinea Pigs and Mushrooms

In a recent interview with Messrs. Jack Arndt, Jack Aarons, Ben Beck, Marvin Klein, and Howard Schrumpf, I reached the conclusion that to be a true "Farm Schooler" a fellow has to have at least one wild idea.

I had heard rumors of guinea pigs in brooder coops and mushrooms in root cellars, but I never believed that they were true. They are, though; I saw the pigs and mushrooms with my own eyes.

I walked over to the New Brooder to see the guinea pigs and there they were, big as life. This experiment all came about when the fellows were having a bull session one evening and the talk got around to guinea pigs (how it got around to guinea pigs we don't know, but it did). The above mentioned gentlemen were already engaged in raising mushrooms and they decided to add the guinea pigs to their list of wild ideas.

The lads intend to use the guinea pigs to prove the genetics book both right and wrong, as a result of a disagreement between Aarons and Beck.

The pigs were obtained from the United States Public Health Service on April 14. They are expected to start their course in Math about the same time this issue comes out. I think they are going to be trained in multiplication only.

Out at Farm Four there is a pile of manure that is slowly rotting. It is there because the same five fellows had another wild idea. They wanted to know how to raise mushrooms, not from a textbook, but from actual experience. About five weeks after this magazine comes out, I expect to see mushrooms served in the mess hall. Do you think I'm right, fellows, or am I expecting them a little too soon?

J. PSMITH

Ed. note: If this is what happens when fellows get wild ideas, our college could use more wild ideas.

Coming Soon! 2nd Annual Peach Festival

ALUMNI NEWS

We noticed that a great many of the alumni attended the Memorial Day festivals. We are sure they enjoyed their stay at Farm School at one of the most scenic times of the year.

The beautiful weekends that we have been having have been bringing out many of our alumni. It's good to see them around the campus.

Some of them are even taking an interest in our sports. When we played one of our scrimmage games in baseball we noticed MR. SEMEL and his father taking a deep interest in our team, or was it the wonderful sun that made the stands a wonderful place for a sun bath?

EXCERPTS FROM THE "ALUMNI GLEANINGS"

MARTY LAHR, '30 seems to be some musician. Maybe we can incorporate his abilities in our new orchestra. SAM ANGERT, '34, who has his own orchestra, regretted very much that he couldn't help out at the football banquet. Congratulations to: SID GORDON, '42 and his wife on the arrival of a baby boy. Also to SHUTSKY, '42 and his wife on the birth of their baby daughter. BORIS DUSKIN, '23 is the father of RUTHIE DUSKIN who has appeared on the famous QUIZ KIDS. Ruthie is the author of several published poems and a Jules Verne type of chemistry book to be published soon. RUTH could read at the age of 4, knew Aesop's Fables at 5, was reading eighth-grade text books at 6.

A. GREENBLATT

Look for The Gleaner's new feature on records and recording artists. Read DISCourse by Mu Sical in the September issue.

The Editor

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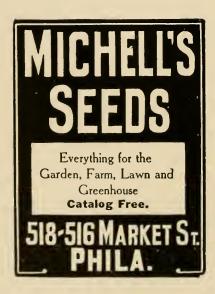
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